IMPROVEMENTS TO ROADS AND DRAINS AT KAREKALLU AND VINAYAKA NAGARA IN WARD NO.14, BAGALAGUNTE, DASARAHALLI-SUB-DIVISION
SL. NO. 05, G.O. NO. 87 (PACKAGE NO. - DHZ 01)

Sl. No.	Description of Work	Chainage from	Chainage to	Unit	No.	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate in Rs.	Amount in Rs.
	Dismantling Work (Footpath, Side Drains & Pre Cast Slabs)										
1	Removing and Stacking of BS slab (PW,P& IWTD SR 2018-19, Pg No 27 Item No.5.32)										
	Dismantling of Drain										
	Vinayakanagra Main Road	193.00	342.00	Sqm	1	149.00	1.35		201.15		
	Cross road 1	0.00	80.00	Sqm	2	80.00	1.35		216.00		
	Cross road 2	0.00	64.00	Sqm	2	64.00	1.35		172.80		
		***Breadth taken in Perimeter**									
									589.95	**104.94**	**61,909.35**
2	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1. 00 km and complete as per specifications. MORTH Specification No.301 (PW,P & IWTD SR 2018-19, Item No.19.14, Page No.143)										
	Excavation For Dain										
	Vinayakanagra Main Road	193.00	342.00	Cum	1	157.00	0.90	0.45	63.59		
	Cross road 1	0.00	80.00	Cum	2	80.00	0.90	0.45	64.80		
	Cross road 2	0.00	64.00	Cum	2	65.00	0.90	0.45	52.65		
	Cross road 3	0.00	85.00	Cum	1	85.00	0.90	0.90	68.85		
	Earthwork For Culvert Portion										
	at Cross road 2			Cum	1	5.00	1.20	0.45	2.70		
	at Cross road 3			Cum	1	4.30	1.20	0.45	2.32		
	Road Formation										
	Vinayakanagra Main	193.00	342.00	Cum	1	149.00	6.20	0.40	369.52		
	Cross road 1	0.00	80.00	Cum	1	80.00	5.00	0.40	160.00		
	Cross road 2	0.00	64.00	Cum	1	64.00	5.40	0.40	138.24		
	Cross road 3	0.00	85.00	Cum	1	85.00	5.00	0.40	170.00		
	Total								**1092.67**	**43.46**	**47,487.31**
3	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH I Chapter 3(PW,P& IWTD SR 2018-19, Pg No 143 Item No. 19.1)										
	Desilting of Drain										
	Vinayakanagra Main Road LHS	0.00	193.00	Cum	1	193.00	0.70	0.45	60.80		
	Vinayakanagra Main Road RHS	0.00	342.00	Cum	1	342.00	0.70	0.45	107.73		
	Earthwork for Kerb										
	Vinayakanagra Main Road	0.00	342.00	Cum	2	342.00	0.20	0.10	13.68		
	Cross road 1	0.00	80.00	Cum	2	80.00	0.20	0.10	3.20		
	Cross road 2	0.00	64.00	Cum	2	64.00	0.20	0.10	2.56		
	Cross road 3	0.00	85.00	Cum	2	85.00	0.20	0.10	3.40		
	For New Drain Portion			Cum	4	0.31		1.80	2.24		
	Total								**193.61**	**137.80**	**26,679.42**

Sl. No.	Description of Work	Chainage from	Chainage to	Unit	No.	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate in Rs.	Amount in Rs.
6	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 -do- TMT Bars Fe 500(PW,P& IWTD SR 2018-19, Pg No 229 Item No.28.8.2)										
						Drain concrete quantity		211.41			
	Quantity at 60 kg/ Cum of M25 concrete for Drains			Tonne					**12.68**		
						Culvert concrete quantity		5.21			
	Quantity at 100 kg/ Cum of M25 Concrete Culvert			Tonne					**0.52**		
									13.21	**72,326.98**	**9,55,106.70**
7	KSRRB M2200-1 Providing weep holes in Brick masonry / Plain / Reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing foce. Complete as per drawing and Technical Specifications including cost of materials, labour, HOM complete as per specifications. MORTH Specification No.2706 & 2200(PW,P& IWTD SR 2018-19 P-229, I-28.10)										
	At 1.5m Center to Center Spacing										
	Drain										
	Vinayakanagra Main Road	193.00	342.00	Rmt	99	0.15			14.90		
	Cross road 1	0.00	80.00	Rmt	107	0.15			16.00		
	Cross road 2	0.00	64.00	Rmt	85	0.15			12.80		
	Cross road 3	0.00	85.00	Rmt	57	0.15			8.50		
	For Culvert										
	at Cross road 2			Rmt	7	0.20			1.33		
	at Cross road 3			Rmt	6	0.20			1.15		
									54.68	**155.82**	**8,520.24**
8	Removing and resetting of footpath slab (PW,P& IWTD SR 2018-19 P-270, I-37.56)										
	For Drain Cover Slabs										
	Vinayakanagra Main Road LHS	0.00	193.00	Sqm	1	193.00	0.90		173.70		
	Vinayakanagra Main Road RHS	0.00	342.00	Sqm	1	342.00	0.90		307.80		
	Resetting slab within Ward using Ward labours										
	Vinayakanagra Main Road	193.00	342.00	Sqm	1	149.00	1.35		201.15		
	Cross road 1	0.00	80.00	Sqm	2	80.00	1.35		216.00		
	Cross road 2	0.00	64.00	Sqm	2	64.00	1.35		172.80		
	Total								**1071.45**	**208.82**	**2,23,740.19**
9	KSRB 15.2.2 : Providing ruled pointing 20 mm deep to stone slab pavements with cement mortar 1:3, 20mm deep, after raking joints nicely lining, including cost of materials, labour, curing complete as per specifications. (PW,P& IWTD SR 2018-19 P-115, I-15.8)										
	Pointing for resetting slabs										
	Vinayakanagra Main Road LHS	0.00	193.00	Sqm	1	193.00	0.90		173.70		

Sl. No.	Description of Work	Chainage from	Chainage to	Unit	No.	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate in Rs.	Amount in Rs.
13	**CONCRETE PAVEMENT KSRRB M600- Cement Concrete Pavements** KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1 ,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a hatching plant, transported to site,laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5 -do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver. (PW,P& IWTD SR 2018-19 P-174, I-22.1.2)										
	Road Formation										
	Vinayakanagra Main Road	193.00	342.00	Cum	1	149.00	6.20	0.10	92.38		
	Cross road 1	0.00	80.00	Cum	1	80.00	5.00	0.10	40.00		
	Cross road 2	0.00	64.00	Cum	1	64.00	5.40	0.10	34.56		
	Cross road 3	0.00	85.00	Cum	1	85.00	5.00	0.10	42.50		
									209.44	**3944.51**	**8,26,137.99**
14	KSRRB M400-17. Providing, laying, spreading and compacting Crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No.406. (PW,P& IWTD SR 2018-19, Pg No 155, Item No. 20.18)										
	Road Formation										
	Vinayakanagra Main Road	193.00	342.00	Cum	1	149.00	6.20	0.10	92.38		
	Cross road 1	0.00	80.00	Cum	1	80.00	5.00	0.10	40.00		
	Cross road 2	0.00	64.00	Cum	1	64.00	5.40	0.10	34.56		
	Cross road 3	0.00	85.00	Cum	1	85.00	5.00	0.10	42.50		
									209.44	**2001.28**	**4,19,148.08**
15	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to18:383-2016, with Superplastizer at 3 Its conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades,textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. (PW,P& IWTD SR 2018-19, Pg No 176 Item No. 22.6.1)										
	Vinayakanagra Main Road	193.00	342.00	Cum	1	149.00	6.20	0.16	147.81		
	Cross road 1	0.00	80.00	Cum	1	80.00	5.00	0.16	64.00		
	Cross road 2	0.00	64.00	Cum	1	64.00	5.40	0.16	55.30		
	Cross road 3	0.00	85.00	Cum	1	85.00	5.00	0.16	68.00		
									335.10	**5354.02**	**17,94,154.13**

Sl. No.	Description of Work	Chainage from	Chainage to	Unit	No.	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate in Rs.	Amount in Rs.
	0.63m dia HDPE Perforated Pipe. For 1.8 Mtr depth,			Rmt	7.20				7.20		
									7.20	**10822.32**	**77920.71**
22	Providing of Geonets for Rain Water Harvesting pit on top of the filter media as specified in drawings or as approved by Engineer Incharge.										
				Sqm	4	0.31			1.25		
									1.25	**71.03**	**88.58**
									Total Cost		**83,72,633.29**
	KRIDL Charges @ 1 % On Construction cost										83,726.33
	GST at 12% of Tender Amount										10,04,715.99
	Preparation of DPR 1.0%										83,726.33
	PMC Charges & Quality Control Charges at 1.0%										83,726.33
	Miscellaneous & unforeseen charges										2,71,471.72
									GRAND TOTAL		**99,00,000.00**

Technically Sanctione for Rs. 99,00,000.00
Rs. In words. Ninety Nine lacharly
Under P-3727 sc-sp/TSP Nukyamantrigala Nava Bengalore Yojane / Nava Nagarothana
Job Code No. 216-20-00015
Registered as CE No. 63 GRAND TOTAL Subject to conditions contained in Enclosed Memo No. CE/Pl./TS../63/19-20, Dt. 14/11/2019
AE/JE: TA 16/4/15 C/F (D) 16/11/2019

CERTIFICATE:

i This work comes within BBMP limits
ii Certified that Personaly Inspected the Work Spot.
iii Certified that the estimate is prepared based on CSR of PWD Bangalore Circle 2018-19.
iv Estimate is prepared Making Use of essential item of work as per site Conditions in safest way of Execution in most economical way.
v This work is not included in any other program of work.

For Alcon Consulting Engineers (India) Pvt. Ltd.

Authorised Signatory

Alcon Consulting Engineers (I) Pvt. Ltd.,
Bengaluru

Assistant Engineer,
Ward No-14
BBMP

Assistant Executive Engineer,
~~Shettyhalli/Dasarahalli/PIA/Hegganahalli~~
Division
BBMP

Excecutive Engineer,
Dasarahalli Division
BBMP

ADMINISTRATIVELY SANCTIONED FOR Rs. 99.00
(Rupees. Ninety nine Lakh Only
Under the Head of Account P-3727 sc-sp/TSP Nukya mantrigala Nava Bengalore Yojane Nava Nagarothana Yojane 172/19-20
Registered to conditions
No. EE/DD/AS/172/19-20 14/11/2019
JE/AE.